REMARKS/ARGUMENTS

The Office Action mailed July 19, 2005 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Applicants gratefully acknowledge the indication of allowance of Claims 18-24, 31-37 and 40.

The 35 U.S.C. § 102 Rejection

Claims 12-17, 25-30, 38, 39 and 41-50 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Shannon[1] This rejection is respectfully traversed.

According to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102(a), (b) and (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.[2]

CLAIMS 12, 25, 38, 39

The Office Action states:

As to Claims 12, 25, 38, 39, Shannon discloses a method and apparatus and a program storage device readable by a machine embodying a program of instructions executable by the machine to perform a method for handling a control message, the method comprising: updating (matching) a source-group data structure using information from a control message, the source-group data structure containing data regarding a multicast group; and adding (associating) an outgoing port index (outgoing packet) to the source group data structure, the outgoing port index identifying a port that received the control message (see col. 13, lines 1-51).

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[1] U.S. Patent No. 6,233,618
[2] Manual of Patent Examining Procedure (MPEP) § 2131. See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant respectfully disagrees for the following reasons:

Shannon does not teach updating a source-group data structure using information from a control message

The Office Action attempts to equate the updating of the source-group data structure with the matching described in Shannon in Col. 13, lines 1-51. However, in Shannon, the matching described involves receiving a packet, then comparing the packet information to database information within the device (see Col. 13, lines 19-21) to perform access control. Thus, the matching merely involves a comparison to database information. However, matching information with information in a database is not equivalent to updating the database information itself. There is no evidence in Shannon that the matching of the packet information with the database information actually results in the updating of the database information. The result of the matching step in Shannon is merely that the device then is able to decide what to do with the packet, not what to do with the database information.

Shannon does not teach adding an outgoing port index to the source group data structure

The Office Action attempts to equate the adding of an outgoing port index to the source group data structure with the associating of a protocol with a specific port, socket, IP address, session number, or other unique identifier as described in Col. 13, lines 46-48 of Shannon. Applicant disagrees with this comparison for several reasons.

First, Shannon does not describe a step of association in that section. Shannon merely compares the packet information with certain tables (tables 1, 2 and 3) to determine how to

handle the packet. As such, Shannon appears to assume that an association between certain protocols and a specific port, socket, IP address, session number, or other unique identifier has already been set up, but doesn't actually teach performing the association itself. Additionally, even if Shannon can be said to teach this step, the step is not enabled. There is no indication in Shannon how an association is made.

Second, a step of association does not equate with a step of adding an outgoing port index. Association is a general term that could mean any type of mapping between two elements, even if the mapping is not stored in a data structure. Additionally, even if it assumed that associating involves the update of a data structure, it does not equate with the very specific type of step described in the claims, namely adding an outgoing port index to the source group data structure.

Third, there is no indication in Shannon that an outgoing port index is added to the source group data structure. Applicant cannot determine which data structure in Shannon the Office Action is equating with the source group data structure, but it is fair to assume it would be either table 1, table 2, or table 3, as those are the only data structures described in Shannon. Applicant refers to Columns 7 and 8 and notes that nowhere in any of those tables is an outgoing port index. The only information stored in the tables is group, source, restricted categories, categories, urls, url segments, and IP addresses. There is no outgoing port index described anywhere in any of the data structures in Shannon.

The Office Action fails to state a prima facie case for the rejection of Claim 39

The Office Action groups Claim 39 in with Claims 12, 25, and 38, yet Claim 39 contains completely different elements that Claims 12, 25, and 38. While this appears just to be an oversight on the part of the Patent Office, Applicant cannot determine from the Office Action on what basis Claim 39 is rejected. Nevertheless, Applicant notes that many of the arguments made below with respect to Claims 16 and 29 would also apply to Claim 39, and thus Applicant respectfully maintains that Claim 39 would be allowable for the same reasons.

Due to these reasons, Applicant respectfully submits the Claims 12, 25, 38, and 39 are in condition for allowance.

CLAIMS 41, 16, 29, AND 46

The Office Action states:

As to Claims 41, 16, 29, 46, Shannon discloses a method and apparatus for handling a control message, the method comprising: deriving a shared source lookup key from multicast group information; searching a forwarding data structure for a forwarding entry having a shared source lookup key matching the shared source lookup key; and if a forwarding entry having a shared source lookup key matching the destination shared source lookup key is found, revising an associated outgoing port in the forwarding entry to match an incoming port for the control message (See col. 13, lines 52-59; col. 14, lines 1-25, 49-60).

Applicant respectfully disagrees for the following reasons:

Shannon does not teach revising an associated outgoing port in the forwarding entry to match an incoming port for the control message

The Office Action does not specifically state what step in Shannon is being equated with revising an associated outgoing port in the forwarding entry to match an incoming port for the control message, but nevertheless Applicant notes that Shannon fails to teach this step for two reasons.

First, Shannon does not teach any revision of a forwarding data structure at all. Shannon merely compares the packet information with certain tables (tables 1, 2 and 3) to determine how to handle the packet. There is no evidence that Shannon revises the forwarding data structure in any way, merely that it utilizes the data structure to determine how to forward a packet. Using a data structure is not equivalent to revising it.

Second, there is no evidence of an outgoing port even being in any of the data structures in Shannon. Applicant cannot determine which data structure in Shannon the Office Action is equating with the forwarding data structure, but it is fair to assume it would be either table 1, table 2, or table 3, as those are the only data structures described in Shannon. Applicant refers to Columns 7 and 8 and notes that nowhere in any of those tables is an outgoing port indicated. The only information stored in the tables is group, source, restricted categories, categories, urls, url segments, and IP addresses. There is no outgoing port described anywhere in any of the data structures in Shannon.

The Office Action fails to state a prima facie case for the rejection of Claims 16, 29, and 46

In the rejection of Claims 41, 16, 29 and 46, the Office Action merely recites a basis for the elements listed in Claim 41. However, Claims 16, 29 and 46 contain different elements than contained in Claim 41. Specifically, Claims 16 and 29 describe "retrieving an outgoing port index associated with an entry in a session data structure, said entry corresponding to said explicit source lookup key" and "updating an outgoing lookup table entry corresponding to said outgoing port index with information regarding designated devices in said multicast group indicated by the control message" (and "means for" performing the same). Claim 46 describes "deriving an explicit source lookup key from the control packet", "searching a session data structure for a session entry having an explicit source lookup key matching the derived explicit source lookup key" and "if a session entry having an explicit source lookup key matching the derived explicit source lookup key is found, revising an associated outgoing port in the session entry to match an incoming port for the control message." The Office Action fails to indicate any basis for any of these elements. The Office Action merely lumps these claims in with Claim 41, which contains different elements. As such, Applicant cannot determine what the basis is for the. rejection of Claims 16, 29, and 46. Nevertheless, Applicant notes that Shannon does not teach these additional elements, at least because Shannon fails to teach any data structure containing the entries described in these elements.

For these reasons, Applicant respectfully submits that Claims 16, 29, 41, and 46 are in condition for allowance.

DEPENDENT CLAIMS

As to dependent Claims 13-15, 17, 26-28, 30, 42-45 and 47-50, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Conclusion

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.
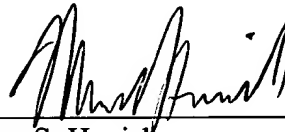
Please charge any additional required fee or credit any overpayment not otherwise paid or

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Respectfully submitted,

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Dated: 10/6/05

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